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Fertilizer Recommendations for Texas

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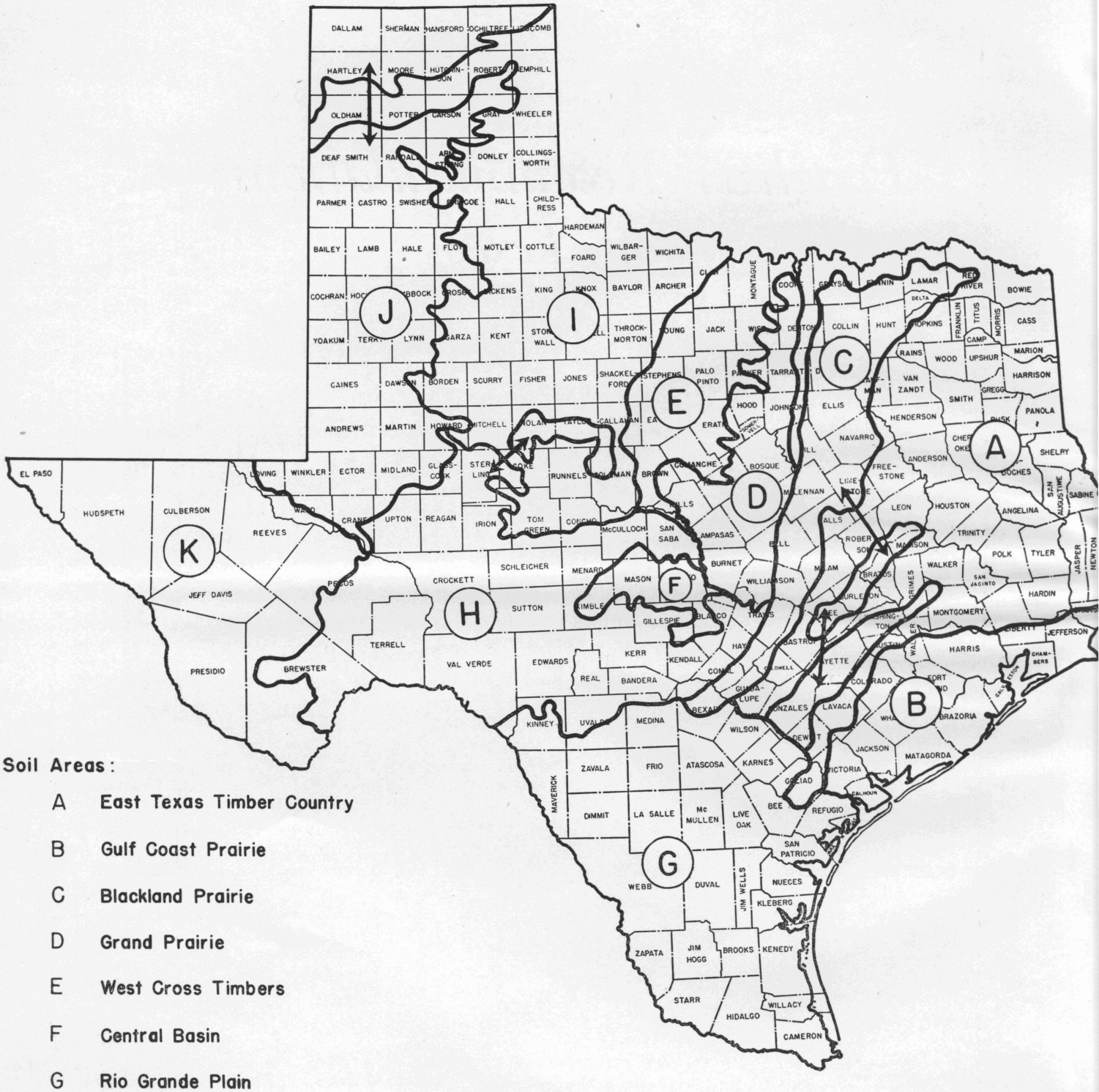
THE SOILS OF TEXAS



Soil Areas:

- A East Texas Timber Country
- B Gulf Coast Prairie
- C Blackland Prairie
- D Grand Prairie
- E West Cross Timbers
- F Central Basin
- G Rio Grande Plain
- H Edwards Plateau
- I Rolling Plains
- J High Plains
- K Mountains and Basins

Adapted from Texas Agricultural Experiment Station Bulletin 431, by W.T. Carter.

Fertilizer Recommendations for Texas

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The use of commercial fertilizers has increased greatly during the past few years. This circular offers suggestions to aid the user of fertilizer in selecting those grades best adapted to the different areas in the state.

For best results with fertilizers, other factors should be favorable; for example, well prepared seed bed, good stand, absence of disease, adequate moisture, and good cultivation. **Good cropping systems with legumes in the rotation generally aid in a favorable response of crops to fertilizers.** It is usually cheaper to use high analysis fertilizers. Low analysis fertilizers cost less per bag, but the cost per acre is greater for the same amount of nutrients. The grades 5-10-5 and 10-20-10 both have the same ratio (1-2-1) of nutrients, but 10-20-10 has twice as much fertilizing value as 5-10-5. It would require only one-half as much per acre to be as efficient as 5-10-5.

Fertilizer is usually applied at the time of planting or just before planting. Mixed fertilizer should not touch the seed. It is best placed in a band two or three inches on one or both sides of the seed and two or three inches below the seed with a fertilizer distributor on the planter. Fertilizers should be put in the ground and not spread on the ground for best results.

Where a large quantity of fertilizer is to be used per acre, part of it may be applied at planting time and the remainder later on after the plants are up and growing.

Side dressing of growing crops with nitrogen is expressed in terms of pounds of actual nitrogen to be applied per acre. These may be converted into pounds of fertilizer by considering the percentage of nitrogen in the fertilizer as shown on the tag. For example, the recommendations suggest 30 pounds of nitrogen per acre for side dressing corn. This may be secured from approximately 100 pounds of ammonium nitrate (33½% N.) or 150 pounds of ammonium sulfate (20% N.) or approximately 200 pounds of sodium nitrate (16% N.) To get 60 pounds of nitrogen, one would use twice the above, and for 20 pounds of nitrogen one would use 2/3 of the quantity needed for 30 pounds.

The river bottom soils of the Trinity, Brazos, Colorado, and others in the central and central western parts of the state may be fertilized according to the recommendations for the Blackland Prairies.

Liquid fertilizers may be used instead of solid fertilizers. The results obtained from the use of liquid fertilizers are in line with those obtained from solid fertilizers. Liquid fertilizers are usually more expensive.

Fertilizers for fruit trees should be applied over the area covered roughly by the spread of the limbs, and worked into the soil by cultivation.

In cases where 20% superphosphate has been recommended, concentrated superphosphate may be used at a proportionally lower rate. For example, 100 pounds of 40% superphosphate will replace 200 pounds of 20% superphosphate.

The quantities suggested in these recommendations are those found best by experiment and by practical experience in the field. Variations from these recommended formulas may be used after experience has been gained in the use of them and the individual has learned for himself what variations are best suited to his conditions and needs.

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EAST TEXAS TIMBER COUNTRY

Field Crops	Fertilizer	Pounds Per Acre
Alfalfa (River Bottom)	20% superphosphate	400
On sandy and sandy loam soils	4-12-8, 3-12-12	500
On acid soils	One to two tons lime additional	
Corn) Grain Sorghum) Sweet Sorghum) Sudan)	5-10-5, 4-12-8, 8-8-8, 4-12-4 Also side dress with 60 lbs. nitrogen. Following fertilized legumes—None	300-400
Cotton	5-10-5, 4-8-8, 6-10-4, 8-8-8 Following fertilized legumes—None	300-400
Legumes, summer	5-10-5, 4-12-4, 4-8-8, 4-12-8	300-400
Legumes, winter	0-14-7, 0-12-12, 3-12-12 or 20% superphosphate	300-400 200-400
Oats and other small grains	5-10-5, 4-12-4 Also top dress in early spring with 30 lbs. nitrogen. Following fertilized legumes—None	300
Pastures, (permanent)		
Grasses only	5-10-5, 4-12-4 Also top dress with 30 lbs. nitrogen.	400-500
Grasses and legumes	20% superphosphate, 4-12-8, 3-12-12	400-500
On deep sandy soils	4-12-8, 3-12-12, 0-14-7	400-500
Pastures, (temporary)		
Small grains	5-10-5, 4-12-4 Also top dress in early spring with 30 lbs. nitrogen. Following fertilized legumes—None	300
Small grains and legumes	0-14-7, 0-12-12, 4-12-8, 3-12-12	300-400
On acid soils	One to two tons of lime additional	
Peanuts	4-12-4	200-400
Sugar Cane	5-10-5, 6-10-4, 8-8-8 Also side dress with 30 lbs. nitrogen.	400-500

Fruits and Truck Crops	Fertilizer	Pounds Per Acre
Lettuce) Cabbage) Mustard) Collards)	5-10-5, 4-8-8, 8-8-8 Also side dress with 30 lbs. nitrogen.	400-600
Carrots) Beets) Turnips)	4-12-4, 4-8-8, 4-12-8	400-600
Sweet Potatoes	4-8-8, 4-12-8, 5-10-5	600-800
Irish Potatoes	4-8-8, 4-12-8, 5-10-5 Also top dress with 45 lbs. nitrogen.	400-600

Fruits and Truck Crops	Fertilizer	Pounds Per Acre
Tomatoes) Peppers) Eggplants)	5-10-5, 4-8-8 or 4-12-4 at planting time in rows And side dress at first bloom with 400 lbs. of 12-0-12 or 5-10-5 at planting time in rows Followed by 300 lbs. 8-8-8 at first bloom and 200 lbs. 8-8-8 three weeks later.	600-800 600 400
Cantaloupes) Squash) Cucumbers) Watermelons)	5-10-5, 4-12-4 Also side dress with 30 lbs. nitrogen.	200-500
Beans) Peas, English) Peas, Blackeye, Purplehull) Etc.)	4-12-4, 5-10-5	300-500
Blackberries) Dewberries)	5-10-5, 4-12-4	600-800
Strawberries	5-10-5 at planting time Also at first bloom Also in late spring after bearing season	400 300 300
		Pounds Per Tree
Apples) Peaches) Plums)	5-10-5, 4-12-4 Side dress with ½ lbs. nitrogen in April or May.	5-8
Pecans (sandy upland)	5-10-5	20-30

GULF COAST PRAIRIE

Field Crops	Fertilizer	Pounds Per Acre
Alfalfa—On heavy alluvial soils	20% superphosphate	400
On sandy alluvial soils	0-14-7, 0-12-12	500
On acid soils	One ton lime additional	
Corn) Grain Sorghum)—Blackland Sweet Sorghum) Sudan)	10-10-0, 6-12-0 or 16-20-0 Also side dress with 40 lbs. nitrogen. Following fertilized legumes—None	300-400 200
On sandy or sandy loam soils	5-10-5, 4-12-4 Also side dress with 40 lbs. nitrogen. Following fertilized legumes—None	300-400
Cotton—Blackland	6-12-0, 10-10-0 or 16-20-0 Following fertilized legumes—None	300-400 200
On sandy or sandy loam soils	5-10-5, 6-10-4 Following fertilized legumes—None	300-400
Flax—Blackland	6-12-0, 10-10-0 or 16-20-0, 12-15-0	200-300 100-150
On sandy or sandy loam soils	5-10-5, 4-12-4	300-400

Field Crops	Fertilizer	Pounds Per Acre
Legumes, summer and winter		
Blackland	20% superphosphate	200
On sandy or sandy loam soils	0-14-7, 4-12-8	300
Pastures, (permanent)		
Blackland		
Grasses only	6-12-0, 10-10-0 or	400
	16-20-0, 12-15-0	200
Grasses and legumes	20% superphosphate	400
On acid soils	One ton of lime additional	
On sandy or sandy loam soils		
Grasses only	5-10-5, 4-12-8	300-500
Grasses and legumes	0-14-7, 4-12-8, 3-12-12	500
On acid soils	One ton of lime additional	
Pastures, (temporary)		
Blackland		
Small grains only	6-12-0, 10-10-0 or	200-300
	16-20-0, 12-15-0	100
Small grains and legumes	20% superphosphate	300-400
On acid soils	One ton of lime additional	
On sandy or sandy loam soils		
Small grains only	5-10-5, 4-12-8	200-300
Small grains and legumes	0-14-7, 4-12-8, 3-12-12	300-400
On acid soils	One ton of lime additional	
Peanuts	4-12-4	200-300
Rice		
Heavy black clay soils	Ammonium nitrate or	250
	Ammonium sulfate or cyanamid	400
Black sandy loam soils	5-10-5	400
	Also top dress with 60 lbs. nitrogen.	
Gray sandy loam	10-10-0 or	400
	16-20-0	250

Truck Crops	Fertilizer	Pounds Per Acre
Lettuce) Cabbage) Mustard) Collards)	5-10-5, 4-12-8 Also side dress with 60 lbs. nitrogen.	400-800
Carrots) Beets) Turnips)	4-12-8, 5-10-5	400-800
Sweet Potatoes	4-8-8, 4-12-8, 5-10-5	300-600
Irish Potatoes	5-10-5, 4-12-8, 4-8-8	400-600
Tomatoes) Peppers) Eggplants)	5-10-5, 4-8-8 Also side dress with 30 lbs. nitrogen.	600-800

Fruits and Truck Crops	Fertilizer	Pounds Per Acre
Cantaloupes) Squash) Cucumbers) Watermelons)	5-10-5 Side dress with 30 lbs. nitrogen.	200-500
Figs	5-10-5	400-600

BLACKLAND PRAIRIE, GRAND PRAIRIE AND EASTERN PART OF EDWARDS PLATEAU

(Including Sandy and Mixed Soilsl)

Field Crops	Fertilizer	Pounds Per Acre
Alfalfa—Blackland and river bottom	20% superphosphate On acid soils, one to two tons lime additional	300-400
Corn) Grain Sorghum)—Blackland Sweet Sorghum) Sudan)	6-12-0, 10-10-0, 10-20-0 or 16-20-0, 12-15-0 Also side dress with 30 lbs. nitrogen. Following fertilized legumes—None	200-300 100-200
On sandy and sandy loam soils (mixed land)	5-10-5, 4-12-4 Side dress with 30 lbs. nitrogen. Following fertilized legumes—None	300-400
Cotton—Blackland	10-10-0, 6-12-0 or 16-20-0, 12-15-0 Following fertilized legumes—None	300-400 200-250
On sandy and sandy loam soils (mixed land)	5-10-5, 4-12-4 Following fertilized legumes—None	300-400
Legumes, summer and winter Blackland	20% superphosphate	200
On sandy and sandy loam soils (mixed land) On acid soils	4-12-4, 0-14-7 One ton of lime additional	300-400
Flax—Blackland	6-12-0, 10-10-0 or 16-20-0, 12-15-0 Also top dress with 30 lbs. nitrogen.	200-300 100-200
On sandy and sandy loam (mixed land)	5-10-5, 4-12-4 Also top dress with 30 lbs. nitrogen.	200-300
Oats, wheat, and other small grains—Blackland	6-12-0, 10-10-0 or 16-20-0, 12-15-0 Also to pdress in spring with 30 lbs. nitrogen. Following fertilized legumes—None	200-300 100-200
On sandy or sandy loam soils (mixed land)	5-10-5, 4-12-4 Also top dress in spring with 30 lbs. nitrogen. Following fertilized legumes—None	200-300

Field Crops	Fertilizer	Pounds Per Acre
Pastures, (permanent)		
Grasses only		
Blackland	Ammonium nitrate (spring and early fall)	100
On sandy or sandy loam soils (mixed land)	5-10-5, 4-12-4	300-400
Grasses and legumes		
Blackland	20% superphosphate	300-500
On sandy or sandy loam soils (mixed land)	0-14-7	400-600
Pastures, (temporary)		
Small grains		
Blackland	6-12-0, 10-10-0 or 16-20-0, 12-15-0 Also top dress in spring with 30 lbs. nitrogen. Following fertilized legumes—None	200-300 100-200
On sandy or sand loam soils (mixed land)	5-10-5, 4-12-4 Top dress in spring with 30 lbs. nitrogen.	200
Small grains and legumes		
Blackland	20% superphosphate	200
On sandy and sandy loam soils (mixed land)	0-14-7	300
Peanuts	4-12-4	200

Truck Crops	Fertilizer	Pounds Per Acre
Carrots—Blackland	6-12-0, 10-10-0 or 16-20-0	400-600 200
On sandy and sandy loam soils (mixed land)	5-10-5, 4-12-4	600-800
Onions—Blackland	6-12-0, 10-10-0 or 16-20-0	400 200
On sandy and sandy loam soils (mixed land)	5-10-5, 4-12-4	600-800
Tomatoes) Peppers)—Blackland	6-12-0, 10-10-0 or 16-20-0	400-600 200
On sandy and sandy loam soil (mixed land)	5-10-5, 4-12-4	600-800

WEST CROSS TIMBERS AND CENTRAL BASIN

Field Crops	Fertilizer	Pounds Per Acre
Alfalfa (subirrigated)	20% superphosphate, 4-16-0	200-400
On deep sands	0-14-7	300-500

Field Crops	Fertilizer	Pounds Per Acre
Grain Sorghum) Corn) Sweet Sorghum) Sudan)	4-12-4, 5-10-5 Also side dress with 30 lbs. nitrogen. Following fertilized legumes—None	150-300
Cotton	4-12-4, 5-10-5, 6-10-4 Following fertilized legumes—None	150-300
Legumes, summer and winter	20% superphosphate	200
On old sandy crop land	0-14-7	300
Oats, wheat and other small grains	6-12-0, 10-10-0 or	200-300
	16-20-0, 12-15-0	100-150
	Also top dress in spring with 30 lbs. nitrogen. Following fertilized legumes—None	
Pastures, (permanent)		
Grasses only	10-10-0, 10-20-0, 6-12-0 or	200-300
	16-20-0, 12-15-0	100
On old sandy crop land	5-10-5	300-500
Grasses and legumes	20% superphosphate, 4-16-0	200-400
On old sandy crop land	0-14-7	300-500
Pastures, (temporary)		
Small grains for grazing	6-12-0, 10-10-0 or	200-300
	16-20-0, 12-15-0	100-150
	Also top dress in early spring with 30 lbs. nitrogen. Following fertilized legumes—None	
On old sandy cropland	5-10-5, 4-12-4 Top dress in spring with 30 lbs. nitrogen.	200
Peanuts	4-12-4	150-200

Fruits and Truck Crops	Fertilizer	Pounds Per Acre
Sweet Potatoes	5-10-5, 4-8-8	400-600
Tomatoes) Peppers)	5-10-5	400-600
Berries	5-10-5	400-500
Cantaloupes) Watermelons)	5-10-5 Also side dress with 30 lbs. nitrogen.	200-500
Apples) Pears)		Pounds Per Tree
For bearing trees	5-10-5 Also side dress with ½ lbs. nitrogen in May or June.	5-8
For young non-bearing trees	8-8-8	1-4
Peaches) Plums)		
For bearing trees	5-10-5 Also side dress with ½ lbs. nitrogen in May or June.	5-8
For young non-bearing trees	8-8-8	1-4

Fruits and Truck Crops	Fertilizer	Pounds Per Acre
Pecans (Upland)		
bearing trees	5-10-5, 6-10-4	20-30
young trees	8-8-8	3-10

ROLLING PLAINS

(On Sandy and Sandy Loam Soils)

This is an area of variable rainfall. In some instances fertilizers will not pay.

Field Crops	Fertilizer	Pounds Per Acre
Alfalfa (subirrigated soils)	20% superphosphate, 4-16-0	300-400
Alfalfa (on old sandy crop land)	0-14-7, 4-12-4	300-500
Grain Sorghum)	6-12-0, 10-10-0 or	200-300
Corn)	16-20-0	100
Sweet Sorghum)	Also side dress with 30 lbs. nitrogen.	
Sudan)		
On old sandy crop land	5-10-5, 6-10-4 Also side dress with 30 lbs. nitrogen. Following fertilized legumes—None	200-300
Cotton	6-12-0, 10-10-0 or 16-20-0, 12-15-0 Following fertilized legumes—None	200-300 100
On old sandy crop land	6-10-4, 5-10-5 Following fertilized legumes—None	200-300
Legumes, summer and winter	20% superphosphate	200-300
On old sandy crop land	0-14-7	300-400
Oats, wheat and other small grains	For grazing and grain Fall application 6-12-0, 10-10-0 or 16-20-0, 12-15-0 Also top dress in early spring with 30 lbs. nitrogen. For grain only, top dress in early spring with 30 lbs. nitrogen.	200 100
On old sandy crop land	5-10-5, 4-12-4 Also top dress in spring with 30 lbs. nitrogen.	200-300
Peanuts	4-12-4	200
Pastures, (permanent)		
Grasses only	10-10-0, 6-12-0 or 16-20-0, 12-15-0	200-300 100-200
On old sandy crop land	5-10-5, 6-10-4	300-400
Pastures, (temporary)		
Small grains only	Same as oats, wheat and other small grains	
Small grains and legumes	6-12-0, 10-10-0 or 16-20-0, or 20% superphosphate	200-300 100-150 200
On old sandy crop land	5-10-5, 4-12-4	300-400

Fruits and Truck Crops	Fertilizer	Pounds Per Tree
Peaches) Plums)	6-12-0, 10-10-0 or 16-20-0, 12-15-0	3-5 1½-2½
On old sandy crop land	5-10-5	5-7
Apples) Pears)	6-12-0, 10-10-0 or 16-20-0, 12-15-0 Also side dress with ½ lbs. nitrogen in May or June.	3-5 2½-3
On old sandy crop land	5-10-5	5-7
		Pounds Per Acre
Grapes	6-12-0, 10-10-0 or 16-20-0	400-500 200-250
Vegetable (general)	5-10-5	300-400

HIGH PLAINS
(Irrigated Land)

Field Crops	Fertilizer	Pounds Per Acre
Alfalfa	20% superphosphate, 4-16-0	300-400
Grain Sorghum) Sweet Sorghum) Corn) Sudan)	Ammonium nitrate as side dressing or Ammonium sulfate as side dressing or Cyanamid (10-30 days before planting).	100-200 200-300 200-300
Cotton	6-12-0, 10-10-0 or 16-20-0, 12-15-0	200-300 100-200
Legumes, summer and winter	20% superphosphate, 4-16-0	200-300
Oats, wheat, and other small grains	Ammonium nitrate (Top dress in early spring) or Ammonium sulfate (Top dress in early spring)	100 150-200
Pastures		
Grasses only	Ammonium nitrate or Ammonium sulfate	100 150-200
Grasses and legumes	20% superphosphate, 4-16-0	200-400
Establishing pastures on old fields	10-10-0, 6-12-0 or 16-20-0, 12-15-0	300-400 150-200
Sugar Beets) Stock Beets)	6-12-0, 10-10-0 or 16-20-0, 12-15-0 Also side dress with 30 lbs. nitrogen.	300-400 150-200

Truck Crops	Fertilizer	Pounds Per Acre
Cabbage) Lettuce) Mustard, etc.)	6-12-0 or 16-20-0, 12-15-0 And side dress with 60 lbs. of nitrogen.	400-500 200-250
Carrots) Beets) Turnips)	5-10-5	400-500
Sweet Potatoes) Irish Potatoes)	5-10-5, 4-8-8 6-10-4, 5-10-5 Also side dress with 30 lbs. nitrogen.	400-600 500-600

Truck Crops	Fertilizer	Pounds Per Acre
Onions	6-12-0, 10-10-0 or	400-600
	16-20-0, 12-15-0	200-300
Tomatoes) Peppers)	5-10-5	600-800
Cantaloupes) Cucumbers) Watermelons) Squash)	5-10-5 Also side dress with 30 lbs of nitrogen when first blooms appear.	400-600
Beans) Peas, English) Peas, Blackeye, Purplehull) Etc.)	5-10-5 or 20% superphosphate, 4-16-0	400-600 200

RIO GRANDE PLAIN

Field Crops	Fertilizer	Pounds Per Acre
Corn) Grain Sorghum)—Blackland Sweet Sorghum) Sudan)	Side dress with 30 lbs. nitrogen.	
On sandy or sandy loam soils	6-12-0, 10-10-0 or 16-20-0, 12-15-0 Also side dress with 30 lbs. nitrogen.	100-200 100
Cotton		
On sandy or sandy loam soils	6-12-0, 10-10-0 or 16-20-0, 12-15-0 Following fertilized legumes—None	200-300 100-200
Legumes, summer and winter		
Blackland	20% superphosphate	200
On sandy and sandy loam soils	4-12-4, or 20% superphosphate	200
Pastures, (permanent)		
Blackland		
Grasses only	Ammonium nitrate or Ammonium sulfate	100 150
Grasses and legumes	20% superphosphate	200
Pastures, (permanent)		
On sandy and sandy loam soils		
Grasses only	6-12-0, 10-10-0 or 16-20-0	200-300
Grasses and legumes	20% superphosphate	200
Pastures, (temporary)		
Blackland		
Small grains only	Ammonium nitrate or Ammonium sulfate	100 150
Small grains and legumes	20% superphosphate	200
On sandy or sandy loam soils		
Small grains only	6-12-0, 10-10-0 or 16-20-0, 12-15-0	200-300 100-200
Small grains and legumes	20% superphosphate	200

Field Crops	Fertilizer	Pounds Per Acre
Peanuts	4-12-4	200

Truck Crops	Fertilizer	Pounds Per Acre
Lettuce)	6-12-0, 10-10-0 or	400-800
Cabbage)	16-20-0	200-400
Spinach	6-12-0	400-600
Carrots)	6-12-0, 10-10-0 or	400-800
Beets)	16-20-0	200-400
Turnips)		
Tomatoes)	6-12-0	400-800
Peppers)		
Eggplants)		
Cantaloupes)	6-12-0, 10-10-0 or	400-600
Squash)	16-20-0, 12-15-0	200-300
Cucumbers)		
Watermelons)		
Grapefruit)	Side dress in spring or early summer with	
Oranges)	70 lbs. of nitrogen.	
Lemons)		
Onions	6-12-0, 4-16-0	600

RIO GRANDE, WINTER GARDEN, EL PASO, EDWARDS PLATEAU AND PECOS IRRIGATED AREAS

Field Crops	Fertilizer	Pounds Per Acre
Alfalfa	20% superphosphate	300-400
Corn)	6-12-0, 10-10-0 or	300-400
Grain Sorghum)	16-20-0, 12-15-0	200
Sweet Sorghum)	Also side dress with 60-80 lbs. nitrogen.	
Sudan)		
Cotton	10-10-0, 6-12-0 or	400-600
	16-20-0, 12-15-0	200-300
Legumes, summer and winter	20% superphosphate	400-600
Pasture, (permanent)		
Grasses only	6-12-0, 10-10-0 or	300-400
	16-20-0, 12-15-0 or	200
	Ammonium nitrate	100
Grasses and legumes	20% superphosphate or	400
	4-16-0	500
Pasture, (temporary)		
Small grains only	10-10-0, 6-12-0 or	400-600
	16-20-0, 12-15-0 or	200-300
	Ammonium nitrate	200

Field Crops	Fertilizer	Pounds Per Acre
Small grains and legumes	20% superphosphate or 10-10-0, 6-12-0, 4-16-0	200-300 300-400
Sugar Beets) Stock Beets)	6-12-0, 10-10-0 or 16-20-0, 12-15-0 Also side dress with 60 lbs. nitrogen.	300-400 150-300

Fruit and Truck Crops	Fertilizer	Pounds Per Acre
Lettuce) Cabbage)	6-12-0, 10-10-0 or 16-20-0, 12-15-0 Also side dress with 60 lbs. nitrogen.	400-800 200-400
Carrots) Beets) Turnips)	6-12-0, 10-10-0 or 16-20-0, 12-15-0	300-600 150-300
Irish Potatoes	6-12-0, 10-10-0 or 16-20-0, 12-15-0	400-800 200-400
Tomatoes) Peppers) Eggplants)	6-12-0, or 10-20-0	300-600
Squash) Cucumbers) Watermelons) Cantaloupes)	6-12-0, 10-10-0 or 16-20-0, 12-15-0 Also side dress at first bloom with 30-60 lbs. nitrogen.	600-800 300-400
Spinach On heavy soils On light soils	 20% superphosphate 6-12-0	 400-600 400-600
Grapefruit) Oranges) Lemons)	10-10-0, 6-12-0 or 16-20-0, 12-15-0 Also side dress with 60 lbs. nitrogen in spring or early summer.	600-800 300-400
Onions	6-12-0 or 4-16-0	600-800
Strawberries	5-10-5 at planting Also side dress with 5-10-5 at first bloom.	800 300

TRUCK CROPS FOR THE LOWER RIO GRANDE VALLEY

(Cameron, Hidalgo, Starr and Willacy counties)

Truck Crops	Fertilizer	Pounds Per Acre
Spinach) Escarole & Endive) Dandelion)	16-20-0 Applied at seeding or	200-400
Collards) Parsley)	10-20-0 Applied at seeding	300-500

30-60 lbs. nitrogen to be applied as side dressing as growth and conditions of the plants indicate.

Cabbage) Broccoli) Lettuce)	10-20-0 Also side dress with 60-80 lbs. nitrogen.	300-500

Truck Crops	Fertilizer	Pounds Per Acre
Tomatoes, Fall	10-20-0 applied in seedbed Also side dress with 60-80 lbs. nitrogen.	300-500
Tomatoes, Spring	10-20-0 applied in seedbed Also side dress with 40-60 lbs. nitrogen.	200-400
Peppers	10-20-0 applied in seedbed Side dress with 30-60 lbs. nitrogen as plants indicate need.	200-350
Eggplants	10-20-0 Also side dress with 30-60 lbs. nitrogen.	200-300
Squash) Cantaloupes) Cucumbers)	6-12-0, or 10-20-0 Also side dress with 30-60 lbs. nitrogen as needed.	300-600
Citrus	16-20-0 in January Also side dress in April with 60-90 lbs. nitrogen.	300-400
Potatoes	6-12-0 or 16-20-0	400-800 200-400
Beets	10-20-0 Also side dress with 40 lbs. of nitrogen as needed.	150-250
Carrots	10-20-0 and 20% superphosphate	100-200
Onions	50-50 mixture 10-20-0 and 0-20-0 or 10-20-0 and 20% superphosphate or 10-20-0 and 47% superphosphate	300-500 150-250 200-300 75-200

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